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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,810	07/12/2000	Wilhelmus Hendrikus Alfonsus Bruls	PHN 17,546	7259

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

DIEP, NHON THANH

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/614,810

Applicant(s)

BRULS ET AL.

Examiner

Nhon T. Diep

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-12,16,17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,16,17 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 4-7: Claims 4-7 depends on canceled claim (claim 2), which render the claims indefinite. For the purpose of examination, the examiner considers claims 4-7 as to be dependent on claim 1.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 6, 11-12 and 16-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartung et al (cited by the applicant).

Hartung discloses a method of embedding auxiliary data in an information signal comprising the step of modifying selected signal samples so as to represent respective symbols of the auxiliary data, characterized in that the signal samples are transformed coefficients obtained by transform coding the information signal and encoded into variable-length code words, the method further comprising the steps of: decoding a

Art Unit: 2613

variable-length code word indicative of a selected coefficient; modifying the selected coefficient so as to represent an auxiliary data symbol; encoding the modified coefficient into a new variable-length code word; and replacing the old code word by the new code word (page 2622, right column, line 30- page 2623, right column, line 9); the step of replacing the old code word by a new code word is omitted if the replacing causes the length of a given sequence of code word to substantially exceed the original length of the sequence (page 2623, right column, ln. 42-46: no transmitting in case  $n_1 > n_0$ ) as specified in claims 1, 4, 6, and 11-12 and 16-17 and 19; wherein the auxiliary data includes data words each represented by plural combinations of data symbols (page 2623, right column, lines 16-36) as specified in claim 4; the given sequence is a transport packet of an MPEG transport stream (page 2621, left col., ln. 7-11) as specified in claim 6; and the data symbols are represented by modulo-n values of the selected coefficients, where n is a predetermined number, or  $n = 2$  (page 2622, right column, lines 15-22: to embed one bit information, digital bit information 0 or 1) as specified in claims 11-12.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartung et al.

As applied to claim 1 above, it is noted that Hartung et al does not particularly disclose the step of inserting dummy bits in a field provided by the format according to which the signal has been coded, if the replacing causes the length of a given sequence of code words to substantially fall short of the length of the original sequence. Since, in the constant bite rate transmission scheme, it is well known that dummy bits is inserted to obtain a constant bit before transmission and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Hartung et al to use in case the CBR scheme is desirable and that dummy bits would be used to achieve the scheme.

7. Claims 5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartung et al, in view of the prior art figure 1D of the present application.

As applied to claim 1 above, it is noted that Hartung et al does not particularly disclose that the given sequence is a slice of MPEG video signal as specified in claim 5 and the given sequence is the sequence of code words between clock reference time stamps which are accommodated in the signal as specified in claim 7; the selected coefficient is a differential DC coefficient representing the difference between DC coefficients of successive blocks of coefficients as specified in claim 8; the step of modifying the selected coefficient comprises adding such a value that the sum of differential DC coefficients of a given series of blocks is not substantially modified as specified in claim 9; and the series of blocks is a slice of an MPEG video signal as specified in claim 10. Prior art figure 1D shows the typical MPEG video sequence which comprises a plurality of slices and begins and ends with time stamps for

Art Unit: 2613

synchronization at the decoding end of the system and differential DC coefficient (VLC word 111). It would have been obvious to one ordinary skilled in the art at the time the invention was made to omit the replacing if the replacing causes the length of a given sequence of code word to substantially exceed the original length of the sequence whereas the given sequence is a slice of MPEG video signal and the sequence of code words between clock reference time stamps which are accommodated in the signal and also the differential DC coefficient such as word 111 could be chosen.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**NHON DIEP**  
**PRIMARY EXAMINER**

*Diep* 12/1/05